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Ref: 8EPR-EP

JUL 0 6 2010

Colonel Thomas C. Chapman
District Commander
Sacramento District, U.S. Army Corps of Engineers
1325 J Street, Room 1480
Sacramento, CA 95814

Re: Action ID: SPK-1992-50255-UO
Narrows Dam and Reservoir Project

Dear Colonel Chapman:

The U.S. Environmental Protection Agency (EPA) continues to have serious concerns regarding the direct, indirect, and cumulative impacts to Aquatic Resources of National Importance (ARNIs) resulting from the above referenced project. This letter follows our comment letter of June 8, 2010, and is sent in accordance with Part IV, 3(b) of the Memorandum of Agreement between the EPA and Department of the Army regarding Section 404(q) of the Clean Water Act (CWA), 33 U.S.C. §1344(q) (404(q) MOA). As discussed further below, the above referenced project will have substantial and unacceptable impacts to Aquatic Resources of National Importance.

EPA believes the proposed project will have substantial and unacceptable impacts to ARNIs due to the size, types and location of aquatic resources affected by the proposed project. The Narrows Dam and Reservoir Project will have unacceptable impacts to 89 acres of montane wetlands and five miles of cold water spring and stream systems associated with upper Gooseberry Creek, and, in addition, will affect lower Gooseberry Creek, Fish Creek, Scofield Reservoir, Price River, Green River and Colorado River due to reduced streamflows. Reduced streamflow below the diversion will lead to a 50-70% reduction in naturally-reproducing cutthroat trout biomass due to reduced habitat availability in Gooseberry Creek, and additional losses in aquatic habitat in the aforementioned streams. Potential water quality and aquatic life impacts exist downstream of Scofield Reservoir in the Price, Green and Colorado Rivers due to reduced releases from the reservoir under the proposed action, including cumulative effects on endangered species in the Green and Colorado Rivers[1].

[1] EPA previously determined the upper Colorado River to be an aquatic resource of national importance in a letter to the Corps regarding the Windy Gap Firming Project proposed in Colorado, December 24, 2008. The upper Colorado River provides a valuable habitat for many aquatic organisms, including four federally endangered fish species, and is a valuable commercial and recreational resource.

Fish and Gooseberry Creeks and associated wetlands, numerous high-yielding springs and tributaries are ARNIs. Lower Fish Creek and Gooseberry Creek are Class 3A (unique) under Utah water quality standards, and are "protected for cold water species of game fish and other cold water aquatic life, including the necessary aquatic organisms in their food chain." Class 3 streams support the majority of the stream fishing in Utah. These creeks maintain naturally-reproducing cutthroat trout fisheries and provide important spawning, nursery and unique habitat for these fishes. In addition to supporting a self-reproducing cutthroat trout population, Fish Creek also is used as spawning and rearing area by rainbow trout and is considered a Blue Ribbon Fishery in Utah. The tributaries of Gooseberry Creek, when flowing, are used extensively by cutthroat trout for spawning and rearing young-of-year fish.

These streams and their associated riparian wetland habitats represent rare aquatic ecosystems, as mountain riparian habitat comprises less than one percent of total land cover in the state. The riparian corridors of Fish and Gooseberry Creeks support extensive tracts of willow dominated habitat, and are regionally important for wildlife and support a diversity of neotropical migratory birds, including the largest breeding population of willow flycatchers, a federally endangered species, in the State. According to the Utah Comprehensive Wildlife Strategy, mountain riparian habitat is considered to be the most important habitat for overall vertebrate diversity and one of the most important to sensitive species in Utah. The U.S. Forest Service rated Fish Creek and Gooseberry Creek high on a regional scale of importance, noting the large amount of remote, undisturbed habitat, free of impoundments and human development. Diversions for water supply result in adverse impacts to montane riparian habitat, as it reduces the amount of water available for riparian vegetation and wildlife, alters natural hydrology, and reduces seasonal overbank flooding and subsequent riparian vegetation recruitment.

The rarity and uniqueness of this montane fish and wildlife habitat, the overall scope of resources affected by the proposed action, and the critical ecological functions support the ARNI designation. Streams and springs have been recognized as difficult-to-replace resources in the recent Compensatory Mitigation for Losses of Aquatic Resources Rule (Mitigation Rule)[2], highlighting the need for increased emphasis on avoidance and minimization requirements and compensatory mitigation for all unavoidable impacts (33 C.F.R. § 332.3(e)(3), and 40 CFR § 230.93(e)(3)). These high altitude streams support critical aquatic life and riparian wetland ecosystems, which provide water quality and wildlife habitat functions in a montane area that is still considered relatively remote and undisturbed.

EPA believes the proposed action fails to comply with the Clean Water Act Section 404(b)(1) Guidelines (Guidelines) (40 C.F.R. Part 230) due to potential availability of less environmentally damaging practicable alternatives, potential for the violation of state water quality standards, potential for the proposed action to cause or contribute to significant degradation to waters of the U.S. and lack of a detailed mitigation plan.

In our June 8, 2010 letter, EPA raised numerous issues concerning the information

[2] Compensatory Mitigation for Losses of Aquatic Resources; Final Rule; April 10, 2008; Department of Defense, Department of the Army, Corps of Engineers, 33 CFR Parts 325 and 332; Environmental Protection Agency, 40 CFR Part 230.

provided through the Pubic Notice, including: 1) the failure to adequately evaluate alternatives for impact avoidance and minimization requirements (40 C.F.R. § 230.10(a)), 2) the potential for the project to cause or contribute to the significant degradation of waters of the United States (40 C.F.R. § 230.10(c)), and 3) the lack of adequate mitigation to fully compensate for aquatic resource losses (40 C.F.R. § 230.10(d)). Additionally, according to the June 7, 2010 letter from the State of Utah to the Bureau of Reclamation, there are water quality and Endangered Species Act concerns that have not been adequately addressed. As such, the project proponent has not illustrated that the proposed action is in compliance with 40 C.F.R. § 230.10(b).

40 C.F.R. § 230.10(a) Alternatives Analysis

The inadequate analysis of alternatives in the Supplemental Draft Environmental Impact Statement (SDEIS) issued by the Bureau of Reclamation will result in substantial and unacceptable impacts to aquatic resource at the Narrows reservoir site because less environmentally damaging practicable alternatives may be available to the applicant. The action alternatives evaluated in the SDEIS are limited to providing storage in Gooseberry Narrows Reservoir at various storage capacities and screened alternatives based on "reasonableness" criteria pursuant to the National Environmental Policy Act. The alternatives need to be screened for "practicability" criteria under the Guidelines. Pursuant to the Guidelines, alternatives are considered practicable if they are available and capable of being done, taking into consideration cost, existing technology and logistics in light of overall project purpose. Other less environmentally damaging practicable alternatives may exist and alternatives for the multiple project purposes should be screened individually (i.e., agricultural versus municipal needs) to determine if a combination of alternatives may be practicable. In addition, EPA believes the project purpose is too narrowly defined in the SDEIS and that the Corps should independently evaluate the project purpose.

EPA believes there may be other less damaging practicable alternatives, both structural and non-structural, including 1) other water agriculture efficiency measures and transfers, 2) expansion of existing reservoirs, 3) construction of off-channel reservoirs, and 4) municipal conservation and reuse, which alone or in combination could meet the project purpose. For example, other potential reservoir storage projects and water supply alternatives such as off-channel reservoirs and aquifer storage and recovery options may be practicable and avoid substantial and unacceptable impacts at the Narrows Reservoir site.

40 C.F.R. § 230.10(c) Significant Degradation

Because the proposed action will inundate 89 acres of wetlands, multiple spring tributaries and 5 miles of cold water stream, as well as substantially reduce streamflows downstream of the impoundment, the combined influence of these direct and indirect effects will have substantial and unacceptable impacts on Gooseberry and Fish Creeks and associated aquatic resources. The direct and secondary impacts associated with the proposed action, in combination with past and present flow management in the Price River Drainage, will cause or contribute to significant degradation of the stream resources in the Price River Drainage, as well as the Green and Colorado Rivers, and will contribute to current water quality impairments and endangered

species issues in these waters. In addition, the proposed project will cause or contribute to significant degradation to Scofield Reservoir due to the reduced flows, and potentially result in an increase in phosphorus concentrations. Scofield Reservoir currently has a Total Maximum Daily Load (TMDL) in order to prevent algal blooms and fish kills in the reservoir.

In addition to dewatering effects in the Price River Drainage and downstream receiving Green and Colorado Rivers, the proposed transbasin diversion will also have significant effects in Cottonwood Creek due to flow augmentation. Increasing flows by 200% in Cottonwood Creek will have substantial effects on sediment transport and will likely lead to scouring and armoring of the stream channel and subsequent loss of habitat quality for vegetation, macro invertebrates and fish, including interstitial spaces for aquatic life refugia. Monitoring and mitigation need to be proposed to ensure that lost ecosystem functions in Cottonwood Creek are sufficiently mitigated.

40 C.F.R. § 230.10(d) Mitigation

The information on mitigation outlined in the Public Notice and SDEIS is not sufficient to determine compliance with the Guidelines (40 C.F.R. § 230.12). In accordance with the regulatory requirements found at 40 CFR § 230.10(c), sufficient compensatory mitigation is required to reduce the proposed impacts below a level of significance. With the information provided, we do not believe that adequate mitigation details have been provided to show that the applicant has offset these effects to aquatic resources. Additionally, due to the significance of adverse impacts, EPA requests that the applicant provide detailed cost estimates for the proposed mitigation to ensure that the proposed alternative is still practicable given the cost of that mitigation.

In order to comply with the Mitigation Rule, a compensatory mitigation plan must be submitted and approved by the Corps before the District Engineer can issue a CWA § 404 permit. This plan must address a number of critical details regarding the mitigation project including: clearly articulated project goals and objectives; project site selection criteria; site protection instruments (e.g., conservation easements); detailed quantitative and qualitative baseline information describing both the impact and compensation sites; a detailed discussion of the mitigation project's credit determination methodology and results; a maintenance plan; ecological performance standards used to evaluate the degree to which compensation projects are replacing lost functions and area; detailed monitoring requirements; a long-term management plan describing necessary long-term stewardship of the compensation sites and who is responsible for performing this stewardship; an adaptive management plan; and financial assurances to ensure project construction, implementation and long-term management.

The mitigation for proposed adverse impacts only provides cursory information on mitigation for wetland and stream impacts and does not include mitigation for the impacts to springs, which, along with streams, are considered difficult-to-replace resources under the mitigation rule. The ecological functions provided by the impacted wetlands, streams, springs and riparian areas must be appropriately characterized and replaced. The proposed mitigation plan fails to adequately compensate for the ARNIs in the project area due to the low likelihood

for ecological success and sustainability when considering the many site-specific mitigation issues on high altitude mitigation sites. Mitigation at high elevation is highly problematic as low night time temperatures and short growing season (due to typical late snow conditions) will greatly reduce and suppress plant growth and viability. To comply with the Guidelines, the applicant will need to provide a thorough analysis of the functions of the affected aquatic resources, indicate in the mitigation plan how these functions will be mitigated (e.g., a credit determination methodology and ecological performance standards) and identify opportunities to mitigate for these lost functions.

The Mitigation Rule's watershed approach also aims to maintain and improve the quality and quantity of wetlands and aquatic resources through strategic selection of compensatory mitigation sites (e.g. in this case, in the same watershed where the impacts occur). Additional mitigation options within the Price River watershed must be pursued to replace lost aquatic resource functions and values in the Price River watershed in order to comply with the Mitigation Rule.

A clear and detailed adaptive management plan is a key component of a mitigation plan for adverse impacts associated with this project. Because of the potential geographic scope of impacts due to reduced (and augmented) streamflows, and the subsequent risk for significant and potentially irreversible changes to aquatic ecosystems, an adaptive management plan that monitors the avoidance and minimization measures and requires compensatory mitigation for unavoidable adverse aquatic ecosystem effects is critical. This plan must include monitoring of specific water quality and aquatic life indicators, consider uncertainties associated with reasonably foreseeable actions, and outline necessary additional mitigation requirements (i.e., operational modifications, bypass flows, etc.), should mitigation prove unsuccessful. The adaptive management plan should also include long-term monitoring of stream geomorphology and sediment movement, as these potential effects will likely occur gradually and may not be detected for several years. In addition, this adaptive management plan should consider uncertainties associated with ecosystem changes due to climate change.

EPA continues to have serious concerns regarding the proposed project's lack of compliance with the requirements of CWA § 404(b) (1) Guidelines. Accordingly, without satisfactory resolution of these issues, EPA will continue to recommend denial of the permit for this proposed project. Your careful consideration of this matter is important for protecting the aquatic resources in Utah.

Thank you for your time and continued attention to this difficult matter. If you have any questions or concerns regarding these comments or recommendations, please contact the most knowledgeable person on my staff, Sarah Fowler (staff contact) at 303-312-6192, the Director of the Ecosystems Protection Program, Bert Garcia at 303-312-6670, or me at 303-312-6308.

Sincerely,

James B. Martin
Regional Administrator
Region 8

CC: Larry Crist, USFWS, Utah Field Office
John Harja, Public Lands Policy Coordination Office, State of Utah
Kerry Schwartz, Bureau of Reclamation, Provo Area Office
Tim Whitman, Corp of Engineers, Bountiful, Utah